

ABSTRACT

It is an object of the present invention to provide an inexpensive and efficient industrial method for obtaining (S)-2-pentanol, (S)-2-hexanol, 1-methylalkyl malonic acid and 3-methyl carboxylic acid at a high optical purity. The present invention provides a method of producing (S)-2-pentanol or (S)-2-hexanol which comprises allowing certain types of microorganisms or transformed cells, a product obtained by treating said microorganisms or cells, a culture solution of said microorganisms or cells, and/or a crude purified product or purified product of a carbonyl reductase fraction obtained from said microorganisms or cells, to act on 2-pentanone or 2-hexanone.